CLAIM OR CLAIMS

- 1. A method of claim wherein a fully commercialized methodology of the military's Network Centric Warfare (NCW) situational awareness generating operational procedures described in 10/605144, 10/708000, and 10/709358 that collectively describe methods centered on three common denominators / building blocks that will collectively enable method to enable Heartbeat e9-1-1
- (1) Common denominator one: The common, consistent, universal method of applying the TCP/IP heartbeat protocol used as an intrinsic timer for data harvesting of user and network state management information such as:
 - current / active data such as: IP lease, location,
 - state information such as moving, at halt that is distributed to queues, file folders, object stores and the like by TCP/IP heartbeat's publish-subscribe functions

This listed data / information is gathered by the ubitquitous TCP/IP heartbeat protocol for retrieval and dissemination by n number of more modern and more capable applications, products or protocols (e.g., TDXP, 802.11s ESS, ZigBee IEEE 802.15.4, Z-Wave type wireless mesh networks, Groove bots, JXTA motes, intelligent agents....).

- (2) Common Denominator two Heartbeat network reconfiguration messages / forms / schemas
- (3) Common Alert Protocol child schemas and or embedded data islands implemented across x complex systems, y federal, state and local contracts, and z product, operating system, network and system types in a standard, non-proprietary military unique method
- 2. A method of claim where the second building block / common denominator is Heartbeat XML network management messages containing TCP/IP's intrinsic get from / send to functions the state management data necessary for network (re) configuration of unicast / multicast subscription groups representing task (re) organization of unit / organizations typical of router/switch and IP/PBX, software PBX (private branch exchange) supported networks thus permitting "spontaneous (re) organization in military terms.
- 3. A method of claim where the third building block / common denominator is the Common Alert Protocol child schema / messages compliant with the Emergency Data Exchange Language Distribution Element EDXL-DE standard that may also include DoD Discovery Metadata Standard DDMS elements as data islands in child schema or as data islands within the main CAP schema designed to trigger data exchange cascades / harvesting to / from disparate stakeholder domains (e.g., .mil, .gov, .edu, .com, .biz, .net, .org.).
- 4. A method of claim wherein aggregated state data elements derived from converted structured military messaging FFIRNs and FUDNs into equivalent XML tags in CAP XML (child) schemas will now be parsed by commercial forms engines with intrinsic message parsers enabling the ability to resolve to the individual platform level (e.g, vehicle, plane, train) describing situational conditions symbolically e.g., "straggler", and under duress platforms of interest / commercial subscribers vice a general geographic area of interest as is the state of the current Common Alert Protocol CAP OASIS standard that is separate and distinct from military equivalent standards.
- 5. A method of claim whereas the Common Alert Protocol CAP equivalent of the Army's Unit Task Order UTO heartbeat (field order) message described by the table in this application that describes the key parameters that enable FBCB2-BFT and their commercial equivalent platforms to receive/transmit current active situational awareness data -- who, what, where, when, how often at a later time if platforms of interest (e.g., GPS equipped handheld, laptop or smart phones) conditions e.g., out of radio range, turned off, or down for maintenance or in a duress condition at the time of the initial or follow on heartbeat timed data collection interval (e.g., stale, straggler).

- 6. A method of claim where DOD, Service and Agency XML repositories supply data element repository for a national / international "Heartbeat e9-1-1, Heartbeat e9-1-2" system of systems accessing these XML repositories such as NEIM, JXDM, DDMS, OpenGIS OGC in EDXL-DE format compliant tags..
- 7. A method of claim where eXtensible markup language (XML) wrapper exposes the military discovery metadata to a web portal for screen refresh / updating faster (e.g, milliseconds, seconds) than the current referenced thirty seconds web portal refresh timing rate quoted in this application's referenced AFCEA Signal Magazine article due to direct schema/message/form exchanges and use of cache technologies.
- 8. A method of claim where the above described CAP child schemas with optional DDMS formatted data islands are jointly designed by Federal e9-1-1 and military standards bodies for implemented
- Through the telecommunication Public Safety Answering Points (PSAPs) of the (inter) national e9-1-1 system
- as requirements in federal contracts such as the General Service Administration's NETWORX & Alliant Contracts, Department of Justice Integrated Wireless Network IWN, DHS EAGLE, Defense Information System Agency Encore II, DHS First Source...) and other contracts that typically contain both telecommunication and situational awareness requirements.
- 9. A method of claim wherein the agreed upon standards shall enable multicast subscription services accessible by neighborhood watch programs and the like equipped with GPS smart phones, handhelds, laptops devices such those operating on the 70+ competing ESS wireless mesh networking standards to enable warfighters and first responders alike to operate in an adhoc, spontaneous fashion as the terrorists do reacting as they have been trained by military inspired network centric warfare procedures on each others networks.